

Appl. No.: 10/004,815
Amdt. Dated 10/24/2007
Reply to Office Action of 07/24/2007

Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

Listing of Claims:

1. (Currently Amended) A communication unit including a display, a user interface separate from the display and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements controlled by said digital control, said intra-changeable elements being defined by having a physical characteristic that is changeable responsive to said digital control, wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, and wherein said intra-changeable elements are used in the user interface of said communication unit, and wherein said intra-changeable elements are compressible and expandable.

2-6. (Canceled)

7. (Previously Presented) A communication unit provided with intra-changeable elements according to claim 1 wherein said intra-changeable elements are piezo-electrical elements.

8. (Currently Amended) A communication unit provided with intra-changeable elements according to claim 1 wherein said intra-changeable elements are made of elasto-resistive materials.

9. (Canceled)

10. (Canceled)

11. (Previously Presented) A communication unit provided with intra-changeable elements according to claim 1 wherein said intra-changeable elements are included in both an input and an output device of said communication unit, and said processor modulates said intra-changeable elements wherein said input and output device is a cover part of the communication unit.

12. (Currently Amended) A method for inputting of data to a communication unit provided with a display, a user interface separate from the display and comprising a keypad wherein individual keys of said keypad are changeable to provide a sensory indication of the keys available to make the communication unit perform an action by pressing said changeable keys, and that change of individual keys is performed by having intra-changeable elements in said individual keys, wherein the method comprises providing an output via the intra-changeable elements responsive to messages generated external to the communication unit and received at said communication unit, and wherein the intra-changeable elements are piezo-electrical elements.

13. (Previously Presented) A method for transferring an input from a first communication unit to a second communication unit, and displaying said input as output in said second communication unit, where operation of said first communication unit includes the following steps:

compressing an input device including intra-changeable elements on a first communication unit;

transforming the input from said intra-changeable elements of said input device to electrical signals;

transferring said electrical signals from said first communication unit to a second communication unit;

and wherein said second communication unit includes the following steps:

receiving said electrical signals from said first communication unit at said second communication unit;

retransforming said electrical signals in said second communication unit to output signals to intra-changeable elements of said second communication unit and;

transferring said output signals to said intra-changeable elements of said second communication unit and expanding said intra-changeable elements according to said output signals.

14. (Currently Amended) A communication device having a user interface for inputting data to the device, the device comprising:

a display separate from the user interface;

a receiver for receiving a control signal; and

a changeable element, responsive to the received signal, to change physical characteristics of the element, wherein the changeable element forms part of the user interface and wherein the changeable element responds to the control signal to indicate an availability of the element for inputting data to the device,

wherein the changeable element is configured to provide an output responsive to messages generated external to the communication device and received at the communication device, and wherein the changeable element is made of elasto-resistive materials.

15. (Previously Presented) A communication device of claim 14, wherein changeable characteristics of the changeable element are controlled by a digital controller with associated random access and read only memories and include at least one of form, color, height, shape, area, volume, temperature and position.

16. (Currently Amended) A communication device having a user interface, the device comprising:

a display separate from the user interface;

a receiver for receiving a control signal; and

a changeable element controlled by a digital controller with associated random access and read only memories and responsive to the received signal to change physical characteristics of the element, wherein the changeable element forms part of the user interface and wherein the changeable element changes physical characteristics in response to the control signal thereby providing a sensory message to a user, and

wherein the changeable element is configured to provide an output responsive to messages generated external to the communication device and received at the communication device, wherein the changeable element is included in both an input and an output device of the communication device, and the digital controller modulates the changeable element, wherein said input and output device is a cover part of the communication device.

17. (Previously Presented) A communication device of claim 16, wherein changeable characteristics of the changeable element include at least one of form, color, height, shape, area, volume, temperature and position.

18. (Canceled)

19. (Currently Amended) A communication device having a user interface, the device comprising:

a display separate from the user interface;
a receiver for receiving a control signal; and

a changeable element controlled by a digital controller with associated random access and read only memories and responsive to the received signal to change characteristics of the element, wherein the changeable element forms part of the user interface and wherein the changeable element changes characteristics in response to the control signal thereby providing a sensory message to a user; and wherein

the changeable element generates control signals in response to a change in characteristics and wherein the communication device further comprises a transmitter for

transmitting control signals generated by the changeable element in response to a physical deformation, and

wherein the changeable element is configured to provide an output responsive to messages generated external to the communication device and received at the communication device, and wherein said changeable element is compressible and expandable.

20. (Currently Amended) A communication unit including a display, a input device separate from the display, and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements being defined by having a physical characteristic that is changeable responsive to control by said digital control, and where said elements are used in the user interface of said communication unit; and wherein said intra-changeable elements are included in an input device of said communication unit, and said digital controller modulates said intra-changeable elements to provide a sensory indication of options of said input device, and

wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, and wherein said intra-changeable elements are piezo-electrical elements.

21. (Currently Amended) A communication unit including a display, a input device separate from the display, and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements being defined by having a physical characteristic that is changeable responsive to control by said digital control, and where said elements are used in the user interface of said communication unit; and wherein said intra-changeable elements are included in an input device of said communication unit, and said digital controller modulates said intra-changeable elements to provide a sensory indication of options of said input device wherein said input device includes at least one of said intra-changeable elements, and

wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, and wherein said intra-changeable elements are made of elasto-resistive materials.

22. (Currently Amended) A communication unit including a display, a user interface separate from the display, and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements being defined by having a physical characteristic that is changeable responsive to control by said digital control, and where said elements are used in the user interface of said communication unit; and wherein said intra-changeable elements are included in both an input and an output device of said communication unit, and said digital controller modulates said intra-changeable elements, and

wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, wherein said digital controller modulates said intra-changeable elements, wherein said input and output device is a cover part of the communication unit.

23. (Currently Amended) A communication unit including a display, an input device, an output device, and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements being defined by having a physical characteristic that is changeable responsive to control by said digital control, and wherein said intra-changeable elements are included in both the input and the output device of said communication unit, and said digital controller modulates said intra-changeable elements so that said input and output device includes at least one of said intra-changeable elements, and

wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, and wherein said intra-changeable elements are compressible and expandable.

Appl. No.: 10/004,815
Amdt. Dated 10/24/2007
Reply to Office Action of 07/24/2007

24. (Currently Amended) A communication unit including a display, a user interface separate from the display, and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements being defined by having a physical characteristic that is changeable responsive to control by said digital control, and where said elements are used in the user interface of said communication unit; and wherein said intra-changeable elements are included in an input device of said communication unit, and that said digital control modulates said intra-changeable elements to provide a sensory indication of options of said input device wherein said input device is a four-way-scroller, and

wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, and wherein said intra-changeable elements are piezo-electrical elements.

25. (Currently Amended) A communication unit including a display, a user interface separate from the display, and a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements being defined by having a physical characteristic that is changeable responsive to control by said digital control, and where said elements are used in the user interface of said communication unit; and wherein said intra-changeable elements are included in an input device of said communication unit, and said processor modulates said intra-changeable elements to provide a sensory indication of options of said input device wherein said input device is a cover part of the communication unit, and

wherein said intra-changeable elements are configured to provide an output responsive to messages generated external to the communication unit and received at said communication unit, and wherein said intra-changeable elements are made of elasto-resistive materials.

26. (Currently Amended) A communication device including a user interface, the device comprising:

Appl. No.: 10/004,815
Amdt. Dated 10/24/2007
Reply to Office Action of 07/24/2007

a display separate from the user interface, and a receiver for receiving a control signal; and

a changeable element controlled by a digital controller with associated random access and read only memories and responsive to the received signal to change characteristics of the element, wherein the changeable element forms part of the user interface and wherein the changeable element changes characteristics in response to the control signal thereby providing a sensory message to a user; and wherein

the changeable element generates control signals in response to a change in characteristics, and

wherein the changeable element is configured to provide an output responsive to messages generated external to the communication device and received at the communication device, wherein the changeable element is included in both an input and an output device of the communication device, and the digital controller modulates the changeable element, wherein said input and output device is a cover part of the communication device.